



# LAND CONDITIONS ASSESSMENT

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## Why

“Actively manage TVA lands to meet desired conditions for their purpose as defined in Reservoir Management Plans.” – *TVA Environmental Policy*

## What

In FY09, TVA Natural Resource Professionals developed an on-the-ground Comprehensive-Land Conditions Assessment (C-LCA) methodology to determine whether individual parcels of land meet desired conditions. The purposes of the C-LCA are to: 1) determine the conditions of TVA lands and 2) identify stewardship needs for maintaining or improving the conditions of a parcel. It is a proactive, responsible, and systematic stewardship approach to natural resource management. Driving and field-based safety measures are an integral component of all activities.

## Where

Assessments are conducted on reservoir properties allocated for Sensitive Resource Management (Zone 3) and Natural Resource Conservation (Zone 4). Lands are selected for C-LCAs via a desktop “Tiering” exercise where parcels are systematically evaluated to determine where “highest valued” assets occur (i.e., which lands have the greatest public use and which lands support the most critical resources).

## When

Assessments are conducted during the “leaf-off season” when vegetation is dormant. Field assessment time is minimized during this period as you can see greater distances and weather conditions are generally more appropriate for field work.

## How

Two person teams, of natural resource professionals, conduct the field assessments. The team evaluates thirteen specific conditions that fall under four resource management categories. The specific parcel conditions assessed are as follows:

### **Public Safety and Use**

Access, Boundary, and Signage  
Dispersed Recreational Impacts  
Public Safety  
Unauthorized Use(s)

### **Resources Protection**

Sensitive Resources  
Species Protection

### **Soil and Water**

Access Road Best Management Practices  
Shoreline Conditions  
Watershed Protection Benefits

### **Vegetation and Wildlife**

Invasive Exotic Plants  
Nuisance or Exotic Animals  
Vegetation Impacts  
Wildlife Habitat

A two-person team can assess about 100 acres per day when vegetation is dormant. Assessments require professional judgment, by experienced specialists, to apply established protocols and criteria. Parcels are assessed by vehicle, boat, and/or foot. A comprehensive assessment is made of each parcel including boundary lines, shorelines, hiking trails, all-terrain vehicle routes, roads, and other identified undeveloped public use areas.

### Ratings and Land Stewardship Needs

An overall parcel rating is determined as “Good,” “Fair,” or “Poor.” These parcel ratings are reported through TVA’s Land Conditions Indicator. Identified stewardship needs and associated corrective action tasks are prioritized in multi-year plans for maintaining and improving land conditions. Desired Land Conditions is a parcel rating of “Good.”

### Progress

Through June 2012, TVA Natural Resource Professionals completed C-LCAs on 56,659 acres of Tier I lands on Cherokee, Douglas, Gunterville, Kentucky, Melton Hill, Nickajack, Normandy, Norris, Pickwick, and Tellico Reservoirs (FY12 goal is 20,000 acres). These lands were selected because: 1) their existing data could be readily integrated into the project’s new ArcGIS and Toughbook automated data management systems, and 2) their geographic locations allow for efficient allocation of trained assessment personnel. Our 5 year goal is to assess all Tier 1 properties. The current Tier 1 acreage estimate is 184,000 acres. C-LCA results through June 2012 are summarized below.

